

# **2020 Census Program Management Review**

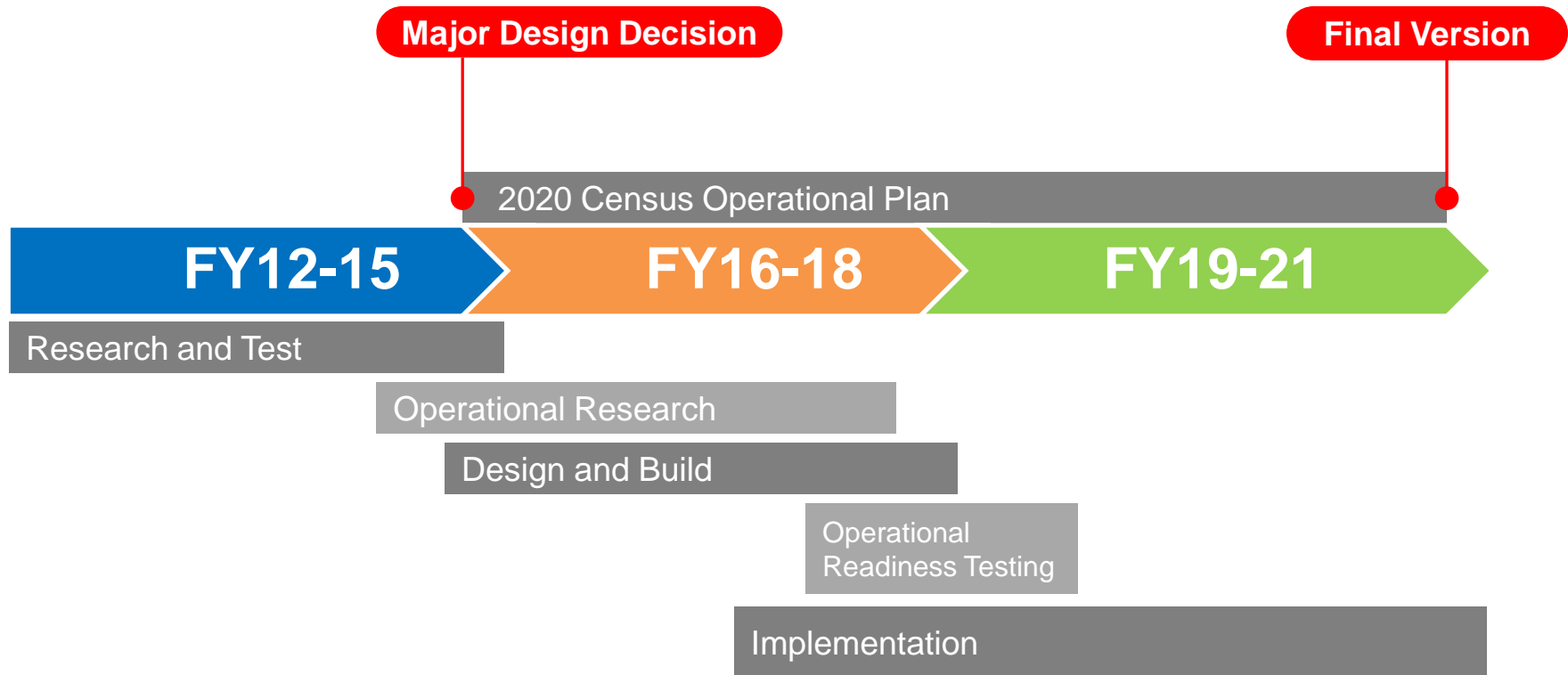
## **2020 Census Operational Plan**

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**January 9, 2015**

V1.0 Final 1/8/15

# 2020 Census Operational Plan Timeline



# 2020 Census Operational Plan

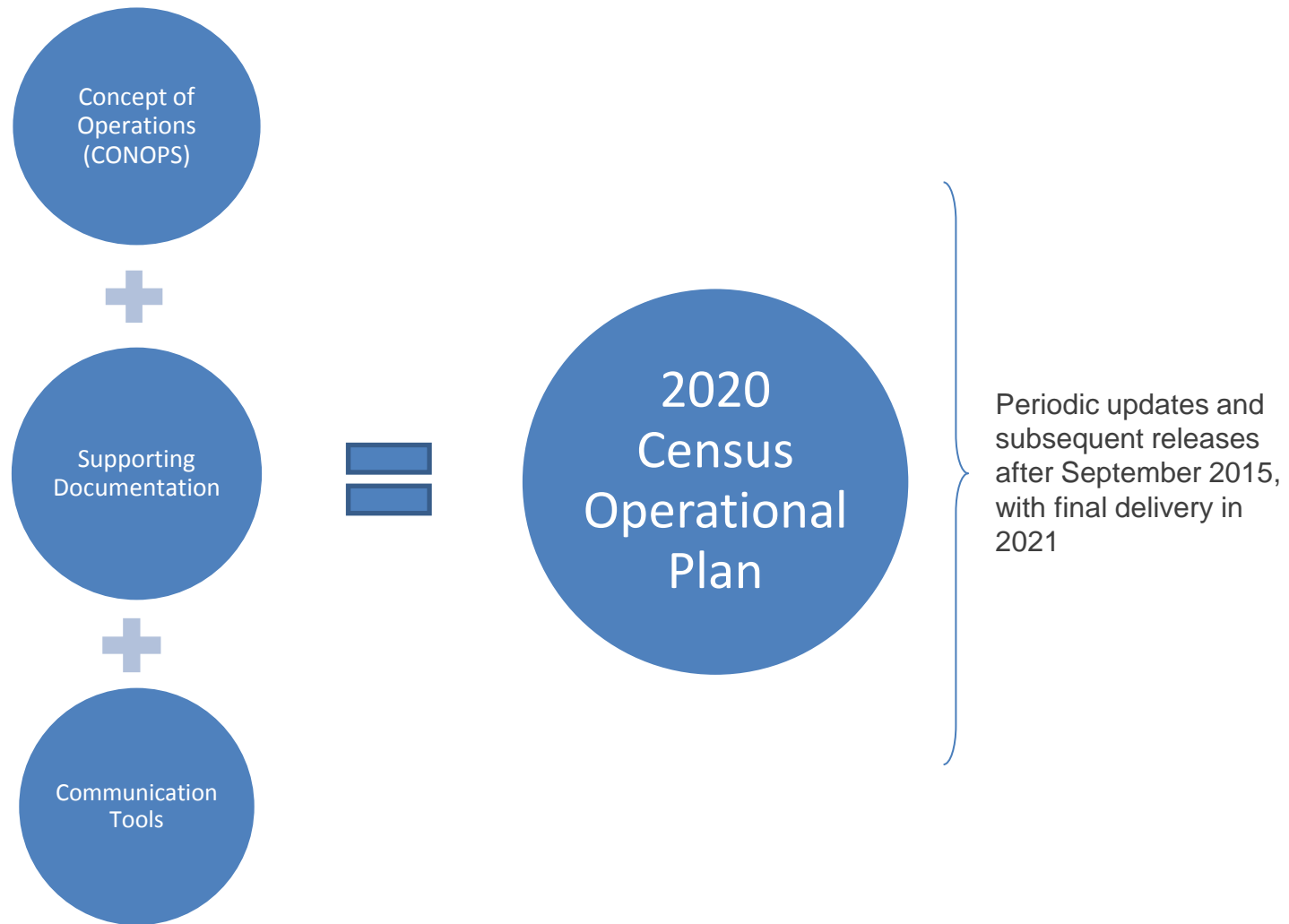
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**A set of documentation**

# 2020 Census Operational Plan

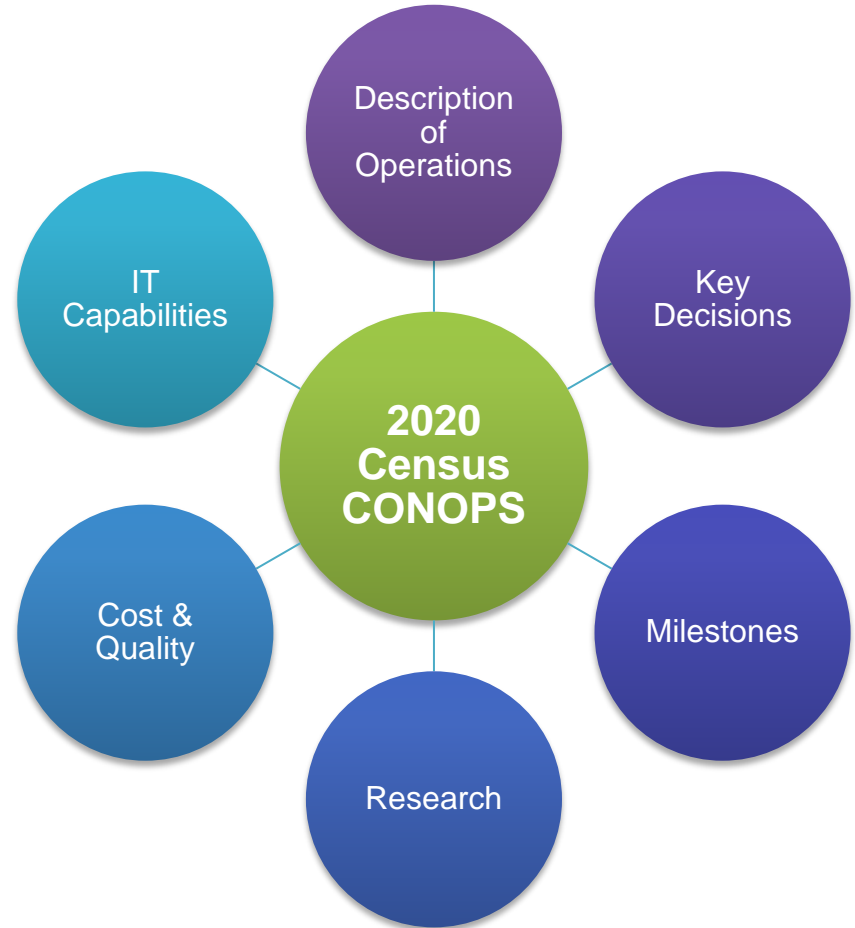
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# 2020 Census Operational Plan

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**Primary component of the  
September deliverable:**  
2020 Census CONOPS



# 2020 Census Operational Plan Team

Member	Division
Al Fontenot	FLD
Andrea Brinson	DMD
Andrea Johnson	GEO
Ann Wittenauer	DSCMO
Bob Colosi	20RPO
Charles Fowler	20RPO
Debbie Fenstermaker	DSSD
Evan Moffett	DMD
Harry Lee	DIR
Hector Merced	FLD
Maryann Chapin	DMD
Mike Perez	DMD
Peter Miller	CSM

*The team does not represent all of the 2020 Census operational areas and will draw upon the 2020 Census teams and subject matter experts throughout the Census Bureau for input and participation, as appropriate.*

# Key Design Areas

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Reengineering  
Address  
Canvassing

Optimizing Self  
Response

Utilizing  
Administrative  
Records

Reengineering  
Field  
Operations

# 2020 Census Operational Plan Team Objectives

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## Document

Develop a narrative inclusive of all of the proposed operational areas for the 2020 Census



## Design

Use the results gathered during the 2020 Census Research and Testing Phase (FY2012 through FY2015), as well as additional modeling and analysis work, as inputs in deriving the major design decision for the 2020 Census



## Communicate

Provide briefings and develop associated tools to assist with internal and external communications regarding the 2020 Census Operational Plan



# Work To Date

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- ✓ Kickoff for the 2020 Census Operational Plan Team on November 20, 2014
- ✓ Team Charter
- ✓ Preliminary life cycle cost estimates to the four areas of innovation
- ✓ Draft Table of Contents for version 1.0 of the 2020 Census Operational Plan due September 30, 2015, including the supporting documentation
- ✓ List of proposed operations for the 2020 Decennial Census
- ✓ Inventory of research informing the 2020 Census Operational Plan
- ✓ List of operational research in FY16-FY18
- ✓ Updates to key activities in FY16-FY17 Life Cycle

# Stakeholder Engagement Plan

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\* Division Chiefs from DMD/20RPO, DSSD, and GEO, as well as the Acting Associate Director for Decennial Census Programs, constitute the Leadership Group.

# 2020 Decennial Census Operations\*

## Program Management

- Program-Project Management
- Security, Privacy, and Confidentiality
- Strategic Communications
- Legal and Policy

## Frame Development

- Geographic Programs
- LUCA
- Address Canvassing
- Update Enumerate

## Data Processing

- Response Processing
- Count Review
- Data Products and Dissemination
- Redistricting Data Program
- Count Question Resolution
- Archiving

## Research and Evaluation

- Coverage Measurement Design and Estimation
- Coverage Measurement Field Operations
- Coverage Measurement Matching (Computer and Clerical)
- 2030 Research and Planning
- Evaluations

## Infrastructure

- Service Center
- Field Infrastructure
- Information Technology Infrastructure

## Response Data Collection

- Content and Forms Design
- Language Services
- Paper Processing
- Communications
- Internet Self Response
- Non-ID Process
- Group Quarters Operations
- Enumeration at Transitory Locations
- Nonresponse Followup
- Island Areas Enumeration
- Federally Affiliated Americans Count Overseas
- Questionnaire Assistance (Telephony)

*\* Proposed Operational Areas, as of December 2014*

# Proposed 2020 Operational Consolidation

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## 2010 Census

Update/Leave

Update/Enumerate

Remote Update/Enumerate

Coverage Followup

Nonresponse Followup

Vacant Delete Check

Field Verification

## 2020 Census

Update/Enumerate

Nonresponse Followup

# 2020 Census Operational Plan

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## Operations

Examples of some operations to illustrate what can be expected in the September 2015 deliverable



## Accomplishments

The research and analysis activities that were accomplished for these operations and where we are today



## The Future—What can be expected

- What will be complete at the end of FY2015
- What will remain to be done -- proposed operational research and development activities for the operations



# Operational Expectations:

## Local Update of Census Addresses (LUCA)

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### LUCA

A partnership program that provides an opportunity, prior to the 2020 Census, for designated representatives of local, state, and tribal governments to review addresses contained in the Census Bureau's MAF/TIGER database

### Assumptions\*

- The 2020 LUCA program will be simplified from the 2010 LUCA program and will be compatible with the Geographic Support System Initiative (GSS-I) and Address Canvassing
- Address Canvassing will be used to validate 2020 LUCA submissions
- Administrative Records, and possibly third-party data sources such as imagery, will be available for validation of LUCA submissions
- The Geographic Update Partnership Software (GUPS) will be available for LUCA participants

*\*Source: Path to 2020 Census Design Decision*

# Operational Expectations:

## Local Update of Census Addresses (LUCA)

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### Completed Research/Development (FY 2012 – 2015)

- ✓ Identified improvements for the 2020 LUCA program
- Determine how in-office canvassing procedures can be used to validate addresses submitted by local governments
- Research additional sources of address data that could be used for independent in-office validation of addresses
- 2020 LUCA Implementation Plan

### Examples of Proposed Research/Development Activities (FY 2016 – 2017)

- Work with OMB to develop a 2020 LUCA Appeals process
- Research various technological improvements to the 2020 LUCA process such as:
  - Use of background imagery on paper maps
  - Ability to provide structure locations in LUCA materials
  - Feasibility of web-based registration for LUCA

# Operational Expectations:

## Local Update of Census Addresses (LUCA)

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### IT Capabilities

- Develop and test the Geographic Update Partnership Software (GUPS) functionality required for LUCA participants
- Develop systems to create, process, and evaluate LUCA submissions



# Operational Expectations:

## Address Canvassing

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### Address Canvassing

- Program will implement a methodology to build an accurate list of addresses in each block to meet the objectives of the 2020 Census
  - Components: How to Canvass, In-Office Canvassing and Validation, In-Field Canvassing, Frame and Operational Quality Control
  - 100% of the addresses will be canvassed via a combination of In-Office, In-Field, and Field Data Collection methodologies

### Assumptions\*

- Canvass In-Field only 20% of the country
- Eliminate Early Local Census Offices
- Reduce the number of crew leader assistants by 50%
- Redesign the training strategy to reduce enumerator training hours by 35%
- Establish a training pay rate \$1.50 lower than the production pay rate

*\*Source: Path to 2020 Census Design Decision*

# Operational Expectations:

## Address Canvassing

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### Completed Research (FY 2012 – 2015)

- Address Validation Test
  - MAF Model Validation Test (MMVT) and Partial-Block Canvassing (PBC)
- In-Office Canvass and Validation Business Process and Procedures
- 2020 Address Canvassing Implementation Plan
- Request for Information: Change Detection
- Request for Proposal: Commercial Data and Services Acquisition

# Operational Expectations:

## Address Canvassing

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### Examples of Proposed Research (FY 2016 – 2018)

- Refine methodologies to ensure In-Office Canvassing meets program quality objectives
- Refine methodologies to ensure In-Field Canvassing meets program quality objectives
- Refine methodologies to resolve ungeocoded addresses via In-Office Canvassing
- Define the field infrastructure (i.e., personnel) needed to support In-Field Canvassing
- Use automation to more efficiently and effectively manage listers

### IT Capabilities

- In-Office Canvassing: Imagery Analysis, Geographic Review Tools, et al.
- In-Field Canvassing: Corporate Listing and Mapping System, Enhanced Operational Control System, et al.

### Evaluation

- Ongoing MAF Coverage Study and field observations
- Statistical models to estimate coverage of the MAF
- Micro-simulator to assess the trade-off between cost and quality

# Operational Expectations:

## Nonresponse Followup (NRFU)

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### Nonresponse Followup

A program of the 2020 Census that integrates software, systems, and procedures for the purpose of determining housing unit status and enumerating housing units that did not self respond

### Components

- Enumerator-assisted
- Administrative Records
- Operational Quality Control

The design of the 2020 Nonresponse Followup program is influenced by many aspects of the 2020 research underway or required in the upcoming years:

- Administrative records
- Field reengineering and adaptive design
- Enterprise IT system solutions

# Operational Expectations: Nonresponse Followup (NRFU)

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## Assumptions\*

- Reduce the total NRFU workload by 11% through the removal of vacants and deletes
- Remove late responses from the NRFU workload
- Reduce the total number of local census offices
- Eliminate crew leader assistants for NRFU
- Achieve goal of having 75% of enumerators bring their own device

*\*Source: Path to 2020 Census Design Decision*

# Operational Expectations: Nonresponse Followup (NRFU)

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## Assumptions (continued)

- Redesign the training strategy to reduce enumerator training hours by 35%
- Establish a training pay rate \$1.50 lower than the production pay rate
- Increase NRFU productivity by 20% with automation
- Use adaptive design (routing and dynamic case management) to allocate resources efficiently
- Introduce a variable contact strategy with an average of three visits
- Eliminate the Vacant/Delete Operation and the Coverage Followup Operation, as known in the 2010 Census

# Operational Expectations: Nonresponse Followup (NRFU)

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## Completed NRFU Research/Development (FY 2012 – 2015)

### ✓ 2013 Census Test/2014 Census Test:

- Administrative records usage to identify and remove vacant and occupied units from the workload
- Adaptive design (dynamic case management) to guide contact procedures and allocate resources
- Reduced contact strategy
- Automated data collection application (COMPASS) [2014 Census Test]

### ✓ SIMEX

# Operational Expectations: Nonresponse Followup (NRFU)

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## Completed NRFU Research/Development (FY 2012 – 2015)

### 2015 Census Test

- Enhancements to administrative records usage to identify and remove vacant and occupied units from the workload
- Adaptive design (dynamic case management) to guide contact procedures and allocate resources
- Reduced contact strategy
- Enhancements to the COMPASS
- Enhanced Operational Control System
- Determination of how we will use administrative records
- Determination on the approach to processing administrative records and identification of resources to develop, test, and implement the needed solution
- Identification of decision points associated with other aspects of administrative records



# Operational Expectations: Nonresponse Followup (NRFU)

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## Examples of Required NRFU Research/Development (FY 2016 – 2018)

- Implementation of administrative records processing capabilities and solutions
- Identification of which administrative records will be used to support the 2020 NRFU operation
- Understand and document the quality implications associated with administrative records
- Determination of NRFU operational timeline

# Operational Expectations: Nonresponse Followup (NRFU)

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## Examples of IT Capabilities Supporting NRFU

- Data collection application (COMPASS)
- Enhanced Operational Control System
- Concurrent Analysis and Estimation System
- Control and Response Data System, Unified Tracking System, etc.
- Administrative Records Database
- Simulations and modeling

## NRFU Evaluations

- Ongoing acquisition and assessment of administrative records and third-party data sources
- Ongoing evaluation and assessment of adaptive design approaches and operational implementation strategies on cost and quality

# Wrap Up

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## 2020 Census Operational Plan underway

- Team commissioned
- Outline (Table of Contents) completed
- 34 operational areas proposed
- Inventories created, documenting the research informing the Major Design Decision as well as operational research needed in FY16-FY18

## Three Month Look-Ahead

- Informal content reviews with the Associate Director this winter
- First draft in late February

## Long Term

- Early iterations pre-decisional
- Version 1.0 baselined September 2015 and briefed in October 2015
- Updates made throughout remainder of lifecycle

# Questions

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